

**CLAIMS:**

5   What is claimed is:

1.   A method of diagnosing network protocol errors using an XML document comprising the steps of:

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capturing data packets exchanged over a network communications line;

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generating an XML document using the captured data packets; and

diagnosing the network protocol errors using the XML document.

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2.   The method of Claim 1 wherein the step of diagnosing including the step of using XML-based analysis mechanism.

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3.   The method of Claim 1 wherein the step of diagnosing including the step of using semantic analysis.

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4.   The method of Claim 1 wherein the step of diagnosing including the step of passing the XML document through a parser.

5.   The method of Claim 4 wherein the data packets are captured through a tcpdump.

6. The method of Claim 5 wherein the data packets are captured through a sniffer.
- 5 7. The method of Claim 6 wherein the step of diagnosing including the step of visually inspecting the XML document.
- 10 8. A computer program product on a computer readable media for diagnosing network protocol errors using an XML document comprising:
- code means for capturing data packets exchanged over a network communications line;
- 15 code means for generating an XML document using the captured data packets; and
- code means for diagnosing the network protocol errors using the XML document.
- 20 9. The computer program product of Claim 8 wherein the code means for diagnosing includes code means for using XML-based analysis mechanism.
- 25 10. The computer program product of Claim 8 wherein the code means for diagnosing includes code means for using semantic analysis.
- 30 11. The computer program product of Claim 8 wherein the diagnosing code means includes code means for parsing the XML document through a parser.

12. The computer program product of Claim 11 wherein the data packets are captured through a tcpdump.
- 5 13. The computer program product of Claim 12 wherein the data packets are captured through a sniffer.
14. The computer program product of Claim 13 wherein the step of diagnosing including the step of visually inspecting the XML document.
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15. An apparatus for diagnosing network protocol errors using an XML document comprising:
- 15 means for capturing data packets exchanged over a network communications line;
- means for generating an XML document using the captured data packets; and
- 20 means for diagnosing the network protocol errors using the XML document.
16. The apparatus of Claim 15 wherein the means for diagnosing includes means for using XML-based analysis mechanism.
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17. The apparatus of Claim 15 the means for diagnosing including means for using semantic analysis.
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18. The apparatus of Claim 15 wherein the diagnosing means includes means for passing the XML document through a parser.
- 5 19. The apparatus of Claim 18 wherein the data packets are captured through a tcpdump.
20. The apparatus of Claim 19 wherein the data packets are captured through a sniffer.
- 10 21. The apparatus of Claim 20 wherein the means for diagnosing including means for visually inspecting the XML document.
- 15 22. A computer system for diagnosing network protocol errors using an XML document comprising:
- at least one memory device for storing code data; and
- 20 at least one processor for processing the code data to capture data packets exchanged over a network communications line, to generate an XML document using the captured data packets, and to diagnose the network protocol errors using the XML document.
- 25 23. The computer system of Claim 22 wherein the processor further processes the code data to use XML-based analysis mechanism.
- 30 24. The computer system of Claim 22 wherein the processor further processes the code data to use semantic analysis.

25. The computer system of Claim 22 wherein diagnosing the network protocol errors includes passing the XML document through a parser.

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26. The computer system of Claim 25 wherein the data packets are captured through a tcpdump.

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27. The computer system of Claim 26 wherein the data packets are captured through a sniffer.

28. The computer system of Claim 27 wherein diagnosing the network protocol errors includes visually inspecting the XML document.

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